INEEL Intelligence
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A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab supports the Department's business lines of environmental quality, energy resources, national security and science.

■ ENERGY RESOURCES – Hydrogen Testing Offers Promising Results

Engineers at the INEEL have summarized test and monitoring results related to the use of hydrogen and blends of hydrogen and compressed natural gas to power advanced internal combustion engine vehicles. Their evaluations indicate that hydrogen can be safely produced and distributed from an urban facility; adding increasing amounts of hydrogen to fuel reduces air pollutants; and, use of hydrogen doesn't significantly reduce performance or require unreasonable engine maintenance. The data are based on driving hydrogen-fueled vehicles more than 200,000 miles. The vehicles are operated through a public/private partnership agreement among DOE, Electric Transportation Applications, Arizona Public Service and the INEEL – and are part of an existing service fleet operating out of Arizona Public Service's hydrogen fueling station in downtown Phoenix. Data collection and evaluation was paid for by DOE's Advanced Vehicle Testing Activity to help companies and institutions make informed decisions about acquiring and operating advanced technology vehicles. More information is available on the web at: http://avt.inel.gov/hydrogen.html.

■ ENVIRONMENTAL QUALITY – Cleanup Milestone Nearing Completion

A decades-old backlog of containerized hazardous and radioactive mixed low-level waste at the INEEL will be eliminated later this year, two years ahead of schedule under an accelerated cleanup plan. To date, nearly half of the total backlog has been removed from Idaho, with just under 1,150 cubic meters remaining that requires treatment and disposal. Disposal of the remaining backlog inventory will be complete in September. "We are very pleased with the accelerated progress we have made removing this waste from Idaho and reducing the risk it poses to the environment," said Susan Stiger, vice president and project manager for the Idaho Completion Project.

■ NATIONAL SECURITY – Video Camera for First Responders Licensed

The Hazmat Cam, a tool to help emergency response team members "see" a little better, has been licensed by View Systems, Inc., Baltimore, Md. Hazmat Cam is a lightweight wireless video camera system that emergency team members can carry to incident scenes. Housed in a tough, waterproof flashlight body, the camera system sends back real-time images to a video monitor, or computer at a command post located up to several miles from the incident area. The license allows View Systems to manufacture the National Security-developed technology for private industry. View Systems previously licensed the INEEL's concealed weapons detector.

■ SCIENCE – JASON Project Takes Idaho Students on Virtual Field Trip

Starting the last week of January, some 7,000 Idaho middle and junior high school students and teachers are training their attention on hot, humid rain forests and the Panama Canal as part of JASON XV: Rain forest at the Crossroads. The unique learning experience will carry them by satellite to a scientific research project in Central America. Schools participating in Idaho and around the world will use the expedition for hands-on learning throughout the year. Endorsed by the National Science Teachers Association, the JASON Project curriculum is correlated with Idaho standards for science, and with national model standards for math, technology, geography and language arts. JASON in Idaho is sponsored by the INEEL.

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